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10/043,241	01/14/2002	Matthias Bratz	42044 Cont.	1890
26474	7590	02/23/2005	EXAMINER	
KEIL & WEINKAUF 1350 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			QAZI, SABIHA NAIM	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/043,241

Applicant(s)

BRATZ ET AL.

Examiner

Sabiha Qazi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**Non-Final Office Action**

Claims 10-17 and 19-21 are pending No claim is allowed.

The previous rejection regarding new matter is maintained because the H in claim 11 is not in the original claim or in the Specification.

Applicant is requested to delete H from the phenyl group in formula (III), which has been inserted in the amendments.

**NOTE:** The 35 USC § 101 rejection has been made because the disclaimer filed by the Applicants to disclaim their US patent<sup>1</sup> has not yet been processed. Once the disclaimer has been approved and processed, the rejection will be withdrawn.

**Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

*Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.*

Claims 10-17 and 19-21 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9 of prior U.S. Patent No. 6,482,772. This is a double patenting rejection. Presently claimed invention is drawn to a solid mixture of sulfonylurea and an alkylpolyglycoside, their preparation and method of use for controlling undesirable plant growth, same invention is claimed in US '772. The claims are EXACTLY the same.

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<sup>1</sup> US Patent No. 6,482,772.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

1<sup>st</sup> Rejection

Claims 10-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over GARST et al<sup>2</sup>. GARST et al is drawn to a composition in dry form which can easily undergo dry blending and milling contains biologically active materials and a solid surfactant composed of a combination of an alkyl polyglycoside and an inert carrier selected from the group consisting of silica, talc, a zeolite, magnesium aluminum silicate, calcium sulfate, magnesium carbonate, magnesium oxide, aluminum oxide.<sup>3</sup> GARST et al teaches a liquid nonionic surfactant into a solid phase agricultural chemical formulation which contains fungicides; bactericides, bacteriostat; insecticides; insect repellents; herbicides and/or plant growth regulators and mixtures thereof so that the liquid nonionic surfactant can function as an effective emulsifier

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<sup>1</sup> US Patent No. 6,482,772.

<sup>2</sup> US Patent No. 5,550,115, published on August 27, 1996. See the entire document.

<sup>3</sup> See abstract.

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when the agricultural chemical formulation is mixed with water.<sup>4</sup> GARST et al also teaches biologically active materials and a solid phase surfactant assume a dry form which can easily undergo dry blending and milling. The solid phase surfactant is comprised of a combination of an alkyl polyglycoside and an inert carrier. The compositions according to the invention allow a liquid nonionic surfactant such as an alkyl polyglycoside to be incorporated into a solid composition containing a biologically active material which includes an insecticide, insect repellent, fungicide, bactericides, bacteriostat, herbicide, a plant growth regulator and the like. The alkyl polyglycoside surfactants assume a dry form while in combination with the inert carrier and are readily desorbed in aqueous media.<sup>5</sup>

Furthermore, GARST et al teaches a method of treating an agricultural substrate comprising introducing to the substrate a sufficient amount of a composition which is comprised of a biologically active material which includes an insecticide, insect repellent, fungicide, a bactericide, bacteriostat, **herbicide, a plant growth regulator** and the like and a solid phase surfactant which is comprised of a combination of an alkyl polyglycoside and an inert carrier along with other adjuvants typically used in agricultural chemical formulations.<sup>6</sup> GARST et al also teaches that preferred alkyl polyglycosides are those in which the alkyl groups contains from 8 to 12 carbon atoms and having an average degree of polymerization of 1.6 to 1.7. The most preferred alkyl polyglycosides are those which have alkyl groups containing 8 to 10 carbon atoms and having an average degree of polymerization of 1.7 and those which have alkyl groups containing 9 to 11 carbon atoms and having an average degree of polymerization of 1.6.<sup>7</sup>

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<sup>4</sup> See lines 50-57 of col. 1.

<sup>5</sup> See lines 58-67 of col. 1 and lines 1-3 of col. 2.

<sup>6</sup> See lines 4-14 of col. 2.

<sup>7</sup> See lines 38-45 in col. 3.

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GARST et al teaches The relative amounts of alkyl polyglycoside and inert carrier which make up the solid phase surfactant can be expressed as a weight ratio of alkyl polyglycoside to inert carrier and can range from 0.10 to 0.90. It is preferred that the solid phase surfactant have a weight ratio of alkyl polyglycoside to inert carrier of from 0.40 to 0.80 and most preferably from 0.60 to 0.65. The solid phase surfactant can be made by any method known to those skilled in the art. One such method is disclosed in U.S. Pat. No. 5,364,647, the entire contents of which are incorporated herein by reference. In one preferred method of making the solid phase surfactants according to the invention, 5 to 65 parts by weight of alkyl polyglycoside of formula I are mixed with 35 to 95 parts by weight of silica and a quantity of water sufficient to produce a mixture which flows freely at a temperature below 80.degree. C. The water is then removed from the mixture by any convenient means such as by spray drying, fluidized bed, or belt drying, so that the a free flowing powder is formed. In another preferred method of making the solid phase surfactants according to the invention, a hot, 50% aqueous solution of an alkyl polyglycoside is sprayed onto precipitated silica such that the resulting solid phase surfactant is comprised of 49% by weight of alkyl polyglycoside and 51% by weight of precipitated silica. The solid phase surfactant thus formed can then be formulated with a biologically active material such as an insecticide, insect repellent, fungicide, bactericides, bacteriostat, herbicide, a plant growth regulator and the like along with other components typically used in such formulations and well known to those skilled in the art to form a formulation suitable for agricultural chemical applications. The solid phase surfactant according to the invention provides an emulsifier, which

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readily enters the water phase when a composition containing the solid phase surfactant and a biologically active material is introduced into water for the purpose of applying it to a plant.<sup>8</sup>

The instant invention would have been obvious to one skilled in the art at the time of invention. There has been ample motivation provided by the prior art to prepare the instant compositions. Poly alkylglycosides are used for the enhancement of the activity of sulfonyl urea therefore, it would have been obvious to prepare the composition containing mainly these two ingredients for the same use.

Normally, change in temperature, concentration, or both, is not a patentable modification; however, such changes may impart patentability to a process if the ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from results of prior art; such ranges are termed "critical" ranges, and applicant has burden of proving such criticality; even though applicant's modification results in great improvement and utility over prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art; more particularly, where the general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation.<sup>9</sup>

It is well established that merely selecting proportions and ranges is not patentable absent a showing of criticality.<sup>10</sup>

It is a general rule that merely discovering and claiming a new benefit of an *old* process cannot render the process again patentable. Nor can patentability be found in differences in ranges recited in the claims. When the difference between the claimed invention and the prior art is some range or other variable within the claims, the applicant must show that the particular

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<sup>8</sup> See lines 55-67 of col. 3 and lines 1-25 of col. 4.

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range is *critical*, generally by showing that the claimed range achieves unexpected results relative to the prior art range.<sup>11</sup>

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings.<sup>12</sup> A reference is not limited to working examples.<sup>13</sup>

Accordingly, the burden of proof is upon applicants to show that instantly claimed subject matter is different and unobvious over those taught by prior art.<sup>14</sup>

The Examiner has considered the data in the Specification. It is unclear why the amount of the active compound was different in each case.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

## 2<sup>nd</sup> Rejection

Claims 10-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MALIK et al<sup>15</sup> and DUPONT<sup>16</sup>.

MALIK et al teaches that various materials such as insecticides, insect repellents, fungicides, bactericides, herbicides, and plant growth regulators may formulated into various

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<sup>9</sup> In re Aller et al. 105 USPQ 233.

<sup>10</sup> In re Becket, 33 U.S.P.Q. 33 (C.C.P.A. 1937). In re Russell, 439 F.2d 1228, 169 U.S.P.Q. 426 (C.C.P.A. 1971).

<sup>11</sup> In re Woodruff, 16 USPQ2d 1934.

<sup>12</sup> In re opprecht 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); In re Bode 193 USPQ 12 (CCPA 1976).

<sup>13</sup> In re Fracalossi 215 USPQ 569 (CCPA 1982).

<sup>14</sup> See In re Brown, 173 USPQ 685, 688; In re Best, 195 USPQ 430 and In re Marosi, 218 USPQ 289, 293.

<sup>15</sup> US Statutory Invention Registration H224, published on March 3, 1987. See the entire document.

<sup>16</sup> Dupont Escort®, Oust®, Telar® Product Information Bulletin, June 1996, 4 pages. See the entire document. Filed in Applicants' PTO-1449.



products for use on crops, for insect control, weed control and the like. Often, these products are applied as a dry powder or a granular material to the surface which is desired to be treated.<sup>17</sup>

MALIK et al teaches a specific dispersing aid is often employed when the product is to be applied in a powder or dry form and yet a second different dispersing aid is required when the product is to be applied as a semi-solid or liquid composition. It would be advantageous to prepare a product comprising the active ingredient and to utilize a single dispersing agent without regard to whether the final use application of the product is in a liquid or solid formulation. Moreover, the desirability of using a single ingredient as a dispersing agent reduces the possibility for error given the number of chemicals which must be compounded to prepare a herbicide or insecticide product.<sup>18</sup> MALIK et al states, "The emulsifying and dispersing capabilities of the dispersing agents of the present invention also make them less resistant to being removed by rain from the surface of a growing plant. The reader is suggested to review U.S. Pat. No. 4,512,989 issued Apr. 23, 1985 to OHYAMA et al. for a general disclosure of agricultural compositions with which the present invention is concerned."<sup>19</sup>

MALIK et al specifically mentions the usefulness of alkyl polyglycosides.<sup>20</sup>

DUPONT teaches that sulfonylurea herbicides are very effective inhibitors of plant cell division and growth. They inhibit the activity of a key enzyme in plants (acetolactate synthase, or ALS) for plant cell growth.<sup>21</sup> Furthermore, DUPONT teaches that Escort, Oust, and Telar (all members of the sulfonylurea family of herbicides) dispersible granules have proven to be stable

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<sup>17</sup> See lines 11-17 of col. 1.

<sup>18</sup> See lines 29-41 of col. 1.

<sup>19</sup> See lines 58-65 of col. 1.

<sup>20</sup> See lines 34-37 of col. 2.

<sup>21</sup> See second paragraph on page 1.

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when stored in their original containers at normal temperatures.<sup>22</sup> DUPONT also teaches that, at pH 5 and pH 9, the hydrolysis half-life is stable.<sup>23</sup>

The instant claims differ from the prior art in claiming a broader scope.

One skilled in the art would have been motivated at the time of invention to prepare any solid composition of any herbicides such as sulfynylureas and alkyl polyglycosides because the prior art of MALIK et al and DUPONT teach these compositions, their uses, and their process of making. The solid composition has been taught by the prior art. Therefore, one skilled in the art who needs to prepare a solid composition of herbicide urea and polyglycosides would be able to make and/or use it because the prior art teaches such compositions and their uses.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

### Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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<sup>22</sup> See "Stability" paragraph on page 1.

<sup>23</sup> See "Hydrolysis Half-Life Table" on page 2.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



**SABIHA QAZ PH.D  
PRIMARY EXAMINER**

**Saturday, February 19, 2005**